

# **The District of Columbia Water and Sewer Authority**

## **Testimony**



## **Committee on Government Reform United States House of Representatives**

**2154 Rayburn House Office Building**

## **Impact of Hurricane Isabel on the Nation's Capital**

**Friday, October 3, 2003**

Good afternoon, Mr. Chairman, I am pleased to be here to represent the District of Columbia Water and Sewer Authority or “WASA.”

We are pleased to be invited to provide testimony today on emergency preparedness, and specifically on:

- how the Authority prepared for the potential effects of Hurricane Isabel
- how we coped with the actual impact of the storm, and
- how any lessons learned will inform plans for any similar events in the future

Just to provide the Committee with a context, WASA is an independent authority of the District of Columbia governed by an eleven-member board of directors named by the local jurisdictions that we serve.

WASA’s operations and capital program are financed through user fees paid by water and sewer service customers, including the federal government. The Board of Directors determines the retail rates and the budget, but the United States Congress as part of the DC Appropriations Act must approve WASA’s annual budget.

WASA provides wastewater collection for the nation’s capital, and wastewater treatment for Prince George’s, Montgomery and Fairfax Counties as well as the District of Columbia at the largest advanced wastewater treatment plant in the world, Blue Plains.

WASA purchases about 70 percent of the drinking water produced by the Washington Aqueduct, and provides retail water delivery in the District of Columbia and to portions of Northern Virginia, including the Pentagon.

### Potential for Problems

Generally, a major storm event can impact WASA’s systems and our customers in a number of ways:

1. a Potomac River flood stage that is in excess of 13 feet may create localized flooding at Blue Plains that could affect wastewater treatment plant operations
2. heavy rainfall in a short period of time may potentially overwhelm different parts of the system intended to collect and direct runoff away from structures and city streets
3. electrical power outages may affect storm and wastewater collection system pumping stations
4. similarly, electrical power outages may impact the drinking water distribution system pumping stations

## The Storm

Approximately, three inches of rain fell the first night and some flooding was anticipated the next few days. The Potomac River was reported to reach a peak level of 11.7 feet Sunday afternoon.

Fortunately, WASA was relatively successful in weathering this event -- we benefited from both good fortune and appropriate preparations in advance of Isabel's arrival.

By 9:00 am on Friday, September 19, 2003, the WASA Emergency Operations Center determined that WASA:

- had fared very well through the initial hurricane
- had no major damage to our facilities or operations
- had no unusual customer calls or complaints, and
- clean up of minor localized flooding at the treatment plant was underway.

## Preparations for the Storm

WASA had worked closely with District Government agencies to ensure timely information sharing and coordination. WASA and the District Emergency Operations Center were prepared to reallocate resources as necessary during the storm and for clean-up operations.

WASA's assistant general manager and two WASA department heads reported to the DC Emergency Management Agency's Emergency Operations Center (EOC) immediately upon its activation at 8:00 AM Wednesday, September 17, 2003.

So that our leadership and essential personnel were fully prepared to manage any emerging issues, the WASA Emergency Operational Center was activated on Thursday, September 18, 2003, at 12:00 noon. The WASA EOC continued to operate through Friday, September 19, 2003, until 3:00 p.m.

The WASA EOC was staffed by the Office of the General Manager, Sewer Services, and Water Services. As important:

- extra customer service reps were available to respond to customer calls
- risk management staff was on hand to handle any customer claims issues
- public affairs and other management staff were available to respond to media inquiries, and to contact the media to provide updates or bulletins to help keep customers informed
- procurement was on hand to help secure equipment, services or other purchases that may have been required on an emergency basis
- IT maintained computer and communications equipment required to monitor WASA facilities, communicate with field crews and the District's EOC, as well as to update information on WASA's website for customers.

It is important to note, however, that WASA's preparations and mobilization began well in advance of the activation of the District of Columbia EOC. For example, WASA:

1. prepared and distributed updated lists of essential personnel contact information
2. operational departments distributed emergency duty schedules/deployment plans
3. major operating units conducted an assessments of in-service equipment; parts, equipment and supplies
4. vehicle maintenance was reviewed and accelerated
5. fuel for vehicles and emergency generators was checked
6. operating departments and procurement cooperated to ensure that WASA had flexibility to use contractors (and that contractors had sufficient capacity) to supplement our water and sewer operations and plant maintenance functions in an emergency
7. accelerated system maintenance schedules in advance of the storms arrival, (we, for example, cleaned a very large number of catch basins in flood-prone areas in a successful effort to help avoid localized flooding)
8. re-enforced and raised the height of existing protective berms that form a barrier between the Potomac and operating facilities at Blue Plains.

The possibility that transportation could be badly disrupted during the storm and its aftermath was an additional concern.

Because WASA operates a large number of facilities, many of which are underground and all of which are widely distributed throughout the District of Columbia, we also pre-positioned some of our operating equipment, supplies, materiel and personnel.

### The Aftermath of the Storm

As I said earlier, WASA and our customers seem to have weathered the storm reasonably well. The initial operational findings are as follows:

- Electrical power was lost to the Alaska and 16<sup>th</sup> Street drinking water pumping station, but a standby generator and operating personnel were placed at the facility for continuous operation until the power was restored – there was no reported interruption of service
- There was minor flooding at the Blue Plains Plant and at a large wastewater pumping station on the Anacostia River, but there was only minor damage
- Three smaller waste and storm water pumping stations lost power, but only one was placed out of service; the other two were quickly restored to service, one having been switched to a standby generator

- A fourth storm water pumping station at 14<sup>th</sup> Street, NW was more problematic. This facility near the Case Bridge flooded because of the very heavy rainfall. The pumps were overwhelmed, resulting in damage to electrical equipment. As a consequence, I-395 traffic was disrupted. Our personnel were dispatched to scene to assist in reducing the flooding. WASA personnel remained on site to ensure no further flooding.

We are reviewing the specific problems that created this unfortunate situation to ensure that it is not repeated.

With respect to customer services, we were, again, very fortunate. WASA only received 34 catch basin complaint calls the first night of the storm. Calls then fell to the normal weekend levels.

### Conclusions and the Future

WASA is conducting a formal debriefing that will form the basis of a report for our Board of Directors in the aftermath of the storm associated with Hurricane Isabel, Mr. Chairman. Some of the information for that work is embodied in our testimony today.

WASA, however, continues to evaluate our capacity as a first responder in an emergency, employee training, facility hardness and access, remote monitoring and other issues that are critically important in preparing for either a natural or other catastrophic event.

WASA is committed to provide the best possible service to each and every one of our customers. We are also mindful of the fact that we serve a very large number of federal facilities that are critically important to the nation.

With the support of the EPA, we were among the first organizations of our kind to undertake and conclude a major vulnerability analysis.

Within a matter of 95 days after September 11, WASA eliminated the use of gaseous chlorine at Blue Plains in order to eliminate any potential for its accidental or intentional release in the nation's capital.

We continue to work with the Council of Governments and other water utilities in the region on the challenges we face in this new environment. One option that has been discussed is the feasibility and wisdom of creating system "interconnections". Such a major pipeline connecting the currently separate water systems in this region would allow us to share critically important water resources in an emergency.

We will continue these efforts, and we appreciate the Committee's interest in this important, but often invisible, work. Again, thank you for the opportunity to participate in this important Hearing today.